Refine Search

Your wildcard search against 10000 terms has yielded the results below.

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The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Search Results -

Terms	Documents
L18 and (detect$ with (position$ or location$) with tire)	12

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: 10/782,539

Refine Search

Recall Text Clear Interrupt

Search History

DATE: Thursday, December 06, 2007 Purge Queries Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR		
L23	L18 and (detect$ with (position$ or location$) with tire)	12	L23
L22	L21 and ((position$ or location$) with tire)	4	L22
L21	L19 and (predetermin$ with signal$ with pattern$)	4	L21
L20	L19 and (pulse$ and (signal$ with pattern$))	8	L20
L19	L16 and @pd<=200402196	8	L19
L18	L10 and @pd<=200402196	86	L18
L17	L10 and @ad<=200402196	86	L17
L16	L15 and synchro$	8	L16
L15	L12 and (filter$ with low$)	8	L15

Hit List

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Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 10 of 12 returned.

☐ 1. Document ID: US 20070156320 A1

L23: Entry 1 of 12 File: PGPB Jul 5, 2007

PGPUB-DOCUMENT-NUMBER: 20070156320
PGPUB-FILING-TYPE:
DOCUMENT-IDENTIFIER: US 20070156320 A1

TITLE: Vehicular Tire Monitoring Based on Sensed Acceleration

PUBLICATION-DATE: July 5, 2007

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Breed; David S.	Boonton Township	NJ	US
Castelli; Vittorio	Yorktown Heights	NY	US
Johnson; Wendell C.	Kaneohe	HI	US
DuVall; Wilbur E.	Reeds Spring	MO	US

US-CL-CURRENT: 701/70

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 2. Document ID: US 20070156312 A1

L23: Entry 2 of 12 File: PGPB Jul 5, 2007

PGPUB-DOCUMENT-NUMBER: 20070156312
PGPUB-FILING-TYPE:
DOCUMENT-IDENTIFIER: US 20070156312 A1

TITLE: Tire Monitoring Techniques

PUBLICATION-DATE: July 5, 2007

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Breed; David S.	Boonton Township	NJ	US

DuVall; Wilbur E.	Reeds Spring	MO	US
Johnson; Wendell C.	Kaneohe	HI	US

US-CL-CURRENT: 701/29

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 3. Document ID: US 20060244581 A1

L23: Entry 3 of 12 File: PGPB Nov 2, 2006

PGPUB-DOCUMENT-NUMBER: 20060244581
PGPUB-FILING-TYPE:
DOCUMENT-IDENTIFIER: US 20060244581 A1

TITLE: Tire Monitoring with Passive and Active Modes

PUBLICATION-DATE: November 2, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Breed; David S.	Boonton Township	NJ	US
DuVall; Wilbur E.	Reeds Spring	MO	US
Johnson; Wendell C.	Kaneohe	HI	US

US-CL-CURRENT: 340/447

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 4. Document ID: US 20050273218 A1

L23: Entry 4 of 12 File: PGPB Dec 8, 2005

PGPUB-DOCUMENT-NUMBER: 20050273218
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050273218 A1

TITLE: System for obtaining vehicular information

PUBLICATION-DATE: December 8, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Breed, David S.	Boonton Township	NJ	US
DuVall, Wilbur E.	Kimberling City	MO	US
Johnson, Wendell C.	Kaneohe	HI	US

US-CL-CURRENT: 701/2; 701/29

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D

☐ 5. Document ID: US 20050187667 A1

L23: Entry 5 of 12 File: PGPB Aug 25, 2005

PGPUB-DOCUMENT-NUMBER: 20050187667
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050187667 A1

TITLE: System and method for identifying tire position on a vehicle

PUBLICATION-DATE: August 25, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Vredevoogd, Loren D.	Holland	MI	US
Honeck, Brian S.	Holland	MI	US
Pinard, Thierry	Garches	MI	FR
Boutroy, Regis	Montivilliers		US

US-CL-CURRENT: 701/1; 340/442

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D

☐ 6. Document ID: US 20040246117 A1

L23: Entry 6 of 12 File: PGPB Dec 9, 2004

PGPUB-DOCUMENT-NUMBER: 20040246117
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040246117 A1

TITLE: Communication system and method for communicating between a tire/wheel assembly and a vehicle body

PUBLICATION-DATE: December 9, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Ogawa, Atsushi	Toyota-shi		JP
Tomioka, Shinichi	Toyota-shi		JP

US-CL-CURRENT: 340/445

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D

☐ 7. Document ID: US 20040130442 A1

L23: Entry 7 of 12 File: PGPB Jul 8, 2004

PGPUB-DOCUMENT-NUMBER: 20040130442
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040130442 A1

TITLE: Wireless and powerless sensor and interrogator

PUBLICATION-DATE: July 8, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Breed, David S.	Boonton Township	NJ	US
DuVall, Wilbur E.	Kimberling	MO	US
Johnson, Wendell C.	Signal Hill	CA	US
Kolomeyko, Anatoliy V.	Kyiv		UA
Shostak, Oleksandr T.	Kyiv		UA

US-CL-CURRENT: 340/443; 340/449

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 8. Document ID: US 20030058118 A1

L23: Entry 8 of 12 File: PGPB Mar 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030058118
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030058118 A1

TITLE: Vehicle and vehicle tire monitoring system, apparatus and method

PUBLICATION-DATE: March 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Wilson, Kitchener C.	Santa Barbara	CA	US

US-CL-CURRENT: 340/679; 340/442, 340/443, 340/683

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 9. Document ID: US 7289022 B2

L23: Entry 9 of 12 File: USPT Oct 30, 2007

US-PAT-NO: 7289022
DOCUMENT-IDENTIFIER: US 7289022 B2

TITLE: Communication system and method for communicating between a tire/wheel

assembly and a vehicle body

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20040246117 A1	December 9, 2004

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Drawn D

☐ 10. Document ID: US 6997048 B2

L23: Entry 10 of 12 File: USPT Feb 14, 2006

US-PAT-NO: 6997048
DOCUMENT-IDENTIFIER: US 6997048 B2

TITLE: Tire pressure monitoring system

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20040099055 A1	May 27, 2004

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Drawn D

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
L18 and (detect$ with (position$ or location$) with tire)	12

Display Format: - Change Format

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Hit List

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Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 11 through 12 of 12 returned.

☐ 11. Document ID: US 6988026 B2

L23: Entry 11 of 12 File: USPT Jan 17, 2006

US-PAT-NO: 6988026
DOCUMENT-IDENTIFIER: US 6988026 B2
** See image for Certificate of Correction **

TITLE: Wireless and powerless sensor and interrogator

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20040130442 A1	July 8, 2004

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D

☐ 12. Document ID: US 5095744 A

L23: Entry 12 of 12 File: USPT Mar 17, 1992

US-PAT-NO: 5095744
DOCUMENT-IDENTIFIER: US 5095744 A

TITLE: Ultrasonic tire testing method and apparatus

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
L18 and (detect$ with (position$ or location$) with tire)	12

L23: Entry 12 of 12 File: USPT Mar 17, 1992

US-PAT-NO: 5095744
DOCUMENT-IDENTIFIER: US 5095744 A

TITLE: Ultrasonic tire testing method and apparatus

DATE-ISSUED: March 17, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Macecek; Mirek	Toronto			CA
Allan; Dave J.	Richmond			CA
Bubik; Leslie	Toronto			CA

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Vulcan Equipment Company	Scarborough			CA	03

APPL-NO: 07/559163 [PALM]
DATE FILED: July 30, 1990

PARENT-CASE:
This is a continuation of co-pending application Ser. No. 07/336,324 filed on Apr. 12, 1989, now abandoned.

INT-CL-ISSUED: [05] G01M 17/02, G01N 29/04

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	G01 M 17/02	20060101

US-CL-ISSUED: 73/146; 73/600, 73/618
US-CL-CURRENT: 73/146; 73/600, 73/618

FIELD-OF-CLASSIFICATION-SEARCH: 73/146, 73/600, 73/618
See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	3882717	May 1975	McCauley	73/600
☐	4275589	June 1987	Dugger et al.	73/146

ART-UNIT: 267

PRIMARY-EXAMINER: Woodiel; Donald O.

ATTY-AGENT-FIRM: Niro, Scavone, Haller & Niro

ABSTRACT:

A method and apparatus for non-destructive ultrasonic testing of tires is disclosed wherein an ultrasonic transmitter is positioned outside of the tire and applies pulses of ultrasound to the tire at a plurality of locations around the tire's circumference for transmission through the tire wall and receipt by an ultrasonic receiver located within the tire. The ultrasonic receiver generates signals in response to the received ultrasonic transmissions and a computer processes these signals to generate characterizing data from which defects in the tire may be determined. Signals representative of the defects are then processed to generate a graphic display illustrating the location of the defects with the tire.

22 Claims, 17 Drawing figures

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Generate Collection Print

L23: Entry 8 of 12 File: PGPB Mar 27, 2003

DOCUMENT-IDENTIFIER: US 20030058118 A1
TITLE: Vehicle and vehicle tire monitoring system, apparatus and method

Pre-Grant Publication Date:
20030327

Detail Description Paragraph:
[0072] When the radial contact region detector 50a is off of the contact region 40, gravity adds a known co-sinusoidal term to the sensed radial acceleration and is a function of the angular location of the accelerometer with respect to the gravity vector as it rotates with the tire:

Detail Description Paragraph:
[0086] Threshold Detection: The on-contact acceleration signal generated by the accelerometer 92 or 96 comprises pulses that are short term compared to the pulses of the off-contact signal, and they can be detected by comparing the filtered signal to a threshold level. A simplified schematic of an exemplary analog adaptive threshold circuit 102 used to filter the signal, set the threshold level, and detect the on-contact pulses is illustrated in FIG. 10. The circuit 102 comprises a high-pass filter 104 to reject the static off-contact and low frequency gravity and vehicle acceleration signals, a low-pass filter 108 to reject road noise, a peak detector 106 to track the peak AC acceleration (peakToPeakAcceleration), a voltage divider and peak detector bleed circuit 112 to set the threshold at half of the peak value, and a comparator 114 to determine the presence of the contact region 40. The threshold is set at half the difference between the off- and on-contact signals in order to equalize the rising and falling signal delays through the filters 104 and 108.

Detail Description Paragraph:
[0089] Implementation of the Radial Contact Region Detector 50a: Referring to FIG. 11, there is shown a partial cross section of the vehicle wheel 34 with the pneumatic tire 36 mounted on the wheel rim 38. The wheel 34 has an axis of rotation 123. Secured to the tire and preferably to the inner tread lining 84 thereof is a contact region detector 50a for detecting radial acceleration in accordance with the specific embodiment under consideration. Although it is evident that the detector 50a may be secured to the lining 84 at various locations along the axial direction, the detector 50a is preferably mounted symmetrically about a central radially-extending plane 128. Although more than one detector 50a may be secured to the lining 84 at various circumferential locations along the lining, as a practical matter only one such detector will be installed in each tire.

Detail Description Paragraph:
[0141] the pressure, temperature, and acceleration detector data are transmitted using a radio frequency transmitter to the vehicle receiver using a randomized pattern;

CLAIMS:

28. In a tire adapted to be mounted on a vehicle wheel, a device for determining the occurrences of deflections of the tire due to a load while rotating upon a

load-bearing surface, the device comprising: a substrate attached to the tire at a selected radial and circumferential location; an accelerometer mounted on the substrate, the accelerometer being disposed to respond to acceleration variations in load-induced tire deflections and being adapted to provide an output representative of said acceleration variations; and an electrical circuit mounted on the substrate, said circuit being responsive to said accelerometer output to provide signals representative of the occurrences of said deflections.

79. The method of claim 78 in which said correcting step comprises the steps of: establishing a rotational index reference; determining the tire rotational position relative to the index; and determining the gravitational term based on the tire rotational position.

86. The method of claim 85 in which said correcting step comprises the steps of: establishing a rotational index reference; determining the tire rotational position relative to the index; and determining the gravitational term based on the tire rotational position.

96. A method for determining the distribution of mass of a vehicle supported by a plurality of wheels, each of the wheels comprising a tire mounted on a rim, the tire and rim of each wheel defining an interior tire cavity, each tire having a contact region between the tire and a load-bearing surface, the contact region being delimited by a leading edge and a trailing edge, each tire having known geometric parameters and position on the vehicle, said method comprising the steps of: a. for each tire: (1) measuring the pressure of the air within the tire cavity; (2) generating a signal representative of said measured air pressure; (3) sensing acceleration in a local region of the tire; (4) detecting the occurrences of a first acceleration variation and a second acceleration variation occurring, respectively, at said leading and trailing edges of the deflection; (5) determining the elapsed time between the occurrences of said first and second acceleration variations and generating a signal representative of said elapsed time; and (6) determining the rotational period of the tire based on the time between the occurrences of sequential acceleration variations at said leading edge or at said trailing edge; and b. computing the distribution of mass of the vehicle based on said signals and the known geometric parameters and positions of each of the plurality of tires.

101. A system for monitoring in real time the load-induced deflection on at least one tire supporting a vehicle and for providing deflection-related information, the at least one tire being mounted on a rim and defining with said rim an interior tire cavity, the at least one tire having a contact region between the at least one tire and a load-bearing surface, the at least one tire having known parameter values, the at least one tire having an on-contact time and a rotational period, said system comprising: an accelerometer disposed within the at least one tire to sense acceleration variations due to load induced tire deflections and for providing an output representative of said acceleration variations; an electrical circuit responsive to said accelerometer output for producing signals from which the ratio of the on-contact time to the rotational period of the at least one tire may be determined; a transmitter mounted within the tire cavity responsive to said ratio-determining signals, for transmitting a signal representative thereof to a location within said vehicle remote from the at least one tire; a receiver within the vehicle remote from the at least one tire for receiving said signals transmitted by the transmitter mounted within the tire cavity; a memory for storing known values comprising parameter values of the at least one tire; and a computer connected to said receiver and memory for computing said deflection-related information based on said transmitted signal and said known tire parameter values.

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L23: Entry 9 of 12 File: USPT Oct 30, 2007

US-PAT-NO: 7289022
DOCUMENT-IDENTIFIER: US 7289022 B2

TITLE: Communication system and method for communicating between a tire/wheel assembly and a vehicle body

DATE-ISSUED: October 30, 2007

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20040246117 A1	December 9, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ogawa; Atsushi	Toyota			JP
Tomioka; Shinichi	Toyota			JP

US-CL-CURRENT: 340/447; 280/727, 280/734, 340/426.31, 340/436, 340/444, 340/472

ABSTRACT:

A communication system for communicating between a tire/wheel assembly and a body of a vehicle of a construction in which the tire/wheel assembly is supported by the vehicle body, has a i) wheel-side communication device that is mounted to the tire/wheel assembly and rotates together with the tire/wheel assembly, and ii) a body-side communication device that is mounted in a fixed position to the vehicle body. The communication system performs communication between the wheel-side communication device and the body-side communication device according to a predetermined rotational position of the tire/wheel assembly.

21 Claims, 18 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 15

L23: Entry 10 of 12 File: USPT Feb 14, 2006

US-PAT-NO: 6997048
DOCUMENT-IDENTIFIER: US 6997048 B2

TITLE: Tire pressure monitoring system

DATE-ISSUED: February 14, 2006

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20040099055 A1	May 27, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Komatsu; Goro	Saitama			JP
Bessho; Makoto	Saitama			JP

US-CL-CURRENT: 73/146.2

ABSTRACT:

A tire pressure monitoring system for monitoring pressure of tires mounted on a vehicle by comparing a detected tire pressure, detected by a pressure sensor installed at each of the tires, with a predetermined value to determine whether the detected tire pressure is proper. The system includes a first temperature sensor that detects internal temperature of the tire, a second temperature sensor that detects ambient temperature at a place where the vehicle locates, and the predetermined value is corrected based on a difference between the detected tire internal temperature and ambient temperature, when the tire pressure is to be adjusted. With this, even if the tire pressure is adjusted when the tire internal temperature is higher than the ambient temperature, the tire pressure can be prevented from falling below the proper pressure when the internal temperature falls to the ambient temperature.

18 Claims, 10 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 8